

A.4.3 SWMU 9

Description

SWMU 9 was identified based on the indicated presence of the burials on the Refinery Leaded Burial Map. SWMU 9 consists of a suspected 20-foot by 20-foot TEL sludge burial located in the northwest corner of Tank Basin 753. It is located approximately 3,000 ft west of the Arthur Kill.

As summarized on Table A.4.2, 10 samples were collected from 14 borings and two monitoring wells (MW-141 and MW-178) were installed in the vicinity of SWMU 9. The seven samples from the 1st-Phase Soil Investigation were analyzed for Skinner's List VOCs and SVOCs, lead and TOL. The three soil samples from MW-141 were analyzed for TCL VOCs and SVOCs and TAL metals. The two groundwater samples were analyzed for TCL VOCs and SVOCs, TAL metals and water quality parameters.

Soils

There were no exceedances of lead, TOL, VOCs or SVOCs in any of the soil samples collected from this SWMU. The only constituent detected above soil delineation criteria at SWMU 9 was naturally-occurring iron.

The fill layer at SWMU 9 ranges in thickness from two to 4.5 feet, and is generally underlain by clay, silt and sand. There was no visual/olfactory evidence of contamination in any of the borings, which ranged in depth from four to 14 ft bgs.

Groundwater

The groundwater sample collected from MW-141 in December 2002 contained benzene (29 µg/L) above the applicable groundwater delineation criterion. A deeper well (MW-178) was installed adjacent to MW-141 in March 2003 and sampled in May 2003. No COCs were detected above applicable groundwater delineation criteria in the deep groundwater sample (MW-178). These wells are directly downgradient of the EY3 LNAPL area, and it is probable that the dissolved benzene observed in the shallow groundwater at this location is associated with the EY3 LNAPL area, and is not related to SWMU 9. Further discussion of groundwater is included in Section 8 of the RFI Report.

Summary

The analytical results for the 10 samples collected from SWMU 9 showed that no constituents were present in excess of applicable soil delineation criteria other than naturally-occurring iron. These samples were deemed to be representative of the location most likely to contain the TEL burial. Based on existing information, Chevron has determined that this SWMU was never used for TEL burial, and has requested an NFA for soils at SWMU 9. However, groundwater exceedances detected at MW-141 will be included as part of the site-wide groundwater evaluation in the CMS.